

Application No.: 09/783,117

Docket No.: 00-VE06.12C1RCE

REMARKS

Claims 1-17, and 23-48 were pending in the application. By this Amendment, Applicant has added new Claims 49-60, which substantially incorporates the subject matter of dependant Claims 46 and 47. Thus, Claims 1-17, and 23-60 are now pending in the application. Favorable reconsideration is respectfully requested in light of the following Remarks.

I. Formal Matters.

1. It is respectfully requested that the United States Patent and Trademark Office change the Attorney Docket Number for this application to reflect the correct Attorney Docket Number of 00-VE06.12C1RCE, not 50107-480.

II. The Claims Define Patentable Subject Matter

1. The Office Action rejects all of the pending Claims 1-17 and 23-48 under 35 U.S.C. §103(a) over U.S. Patent No. 5,592,530 to Brockman et al. ("Brockman") in view of U.S. Patent No. 5,905,985 to Malloy et al. ("Malloy"). The rejection is respectfully traversed.

The Office Action has essentially has repeated, verbatim, the same rejections to Claims 1-17 and 23-43, as those set out in the July 16, 2003 Office Action. Applicant traverses the rejection of Claims 1-17 and 23-43 by the Examiner for the following reasons. Applicant agrees with the Office Action that Brockman clearly teaches "...a telephone monitoring system which can monitor SS7 messages of a mated pair cluster...(that detect) SS7 messages pertaining to a particular phone number..." (See: July 16, 2003 Final Office Action at page 18, lines 14-20). Applicant also respectfully points out that the mated pair cluster, as recited in Brockman, are Signal Transfer Points (STPs) (see col. 1, lines 42-45, col. 2, lines 1-3, col. 9, lines 15-16).

Applicant also agrees with the Office Action that there is no mention in Brockman of at least the feature of performing an on line analysis program to obtain a multidimensional database, the on line analysis program supporting interactive analysis for one or more users, and providing (network traffic load) reports thereof, as recited in independent Claims 1, 23, 29, 32, 38, and 43 (Office Action, page 2, lines 12-14). However, the Office Action asserts that it would have been obvious to modify the telephone switch dual monitors in Brockman with the relational database modification apparatus of Malloy to meet the claimed invention. Applicant respectfully disagrees with this assertion.

Application No.: 09/783,117

Docket No.: 00-VE06.12C1RCE

Applicant respectfully submits that Brockman's sole focus is the health of an SS7 data network (See: Abstract; col. 1, lines 62-65) by deploying monitoring equipment at STPs (col. 9, lines 15-16) to determine error conditions at the application layer of the network (col. 3, lines 25-31). In order to determine the health of an SS7 data network, Brockman refers to messaging (data signaling) between two switching entities (i.e. a mated pair of switching nodes, such as STPs) (col. 1, lines 42-45, col. 2, lines 1-3, col. 9, lines 15-16).

Conversely, the concern of the present invention is the health of a voice-switch telecommunications network (i.e. call-carrying signaling in the voice-carrying network) by monitoring call-carrying voice signaling between SSPs (e.g. a central office, tandem switch, or an end-office switch) in order to monitor for congestion in a trunking network as a result of routing utilization or unbalanced loading between the service switching points (SSPs) in the voice-switching telecommunications network from multiple switched calls (See: Applicant's specification at page 11, lines 16-22; page 25, line 6 – page 26, line 28; page 40, line 18 – page 41, line 14). Brockman identifies an SSP (e.g. a central office switch, tandem switch, or end office switch) at col. 1, lines 33-37, and states that "a key advantage of the present invention is to deploy the monitoring equipment at the STPs, rather than at the SSPs" (See: col. 9, lines 15-50).

With respect to Claims 44-48, Applicant notes that the Office Action is completely silent in applying a rejection to the "multiple interoffice calls" verbiage in independent Claim 44. The multiple 'interoffice' limitation further supports and differentiates the claimed subject matter of the invention from Brockman. Applicant respectfully requests that the Office Action point to a specific column and line number in the applied art such that the Applicant may provide a proper response to the Office Action. Even in view of the applied rejection to Claim 44 by the Office Action, Applicant contends that Claim 44 is in allowable form. Additionally, the Office Action rejects the subject matter of Claims 46 and 47 (See: Office Action at page 16, line 16 – page 18, line 9) without pointing to a specific column and line number in Brockman that recites 'unbalanced loading between SSPs' and 'routing utilization between SSPs.'

Applicant respectfully points to the subject matter of Claim 46, which recites, "*wherein the monitoring step includes monitoring for congestion in a trunking network as a result of unbalanced loading between the service switching points (SSP) in the voice-switching telecommunications network.*" With respect to the rejection of Claim 46, the Office Action

Application No.: 09/783,117

Docket No.: 00-VE06.12C1RCE

attempts to show that Brockman recites 'monitoring for congestion' by pointing to col. 3, lines 4-16, which is directed to mass onset call detection. Applicant respectfully disagrees.

After conducting a key-word search on USPTO.gov's search engine, Applicant is unable to locate any reference of 'congestion' in Brockman's description. Additionally, after further examination of col. 3, lines 4-16, Applicant respectfully points out that the alleged 'monitoring for congestion' as applied to the mass onset call detection is only related to one (i.e., a single) particular number (see: col. 3, line 13) and not for multiple calls as recited by the claimed invention. More specifically, as seen at col. 14, lines 15-22, "*I/O processors...assign Particular call transaction to an application processor... (which) are responsible for load-sharing across application processors. All of the SS7 messages related to one call transaction will be handled entirely by one application processor in each monitor connected to STP1 and STP2.*" Thus, supporting Applicant's position, Brockman only appears to discuss load-sharing operation between STPs for a single call, as opposed to 'monitoring for unbalanced loading between SSPs for multiple interoffice calls,' as recited in the claimed invention. Even if the Office Action's alleged 'monitoring for congestion' rejection was positively supported, the alleged step would only be directed to a single, particular call transaction.

Applicant also respectfully points to the subject matter of Claim 47, which recites, "*wherein the monitoring step includes monitoring for congestion in a trunking network as a result of routing utilization between the service switching points (SSP) in the voice-switching telecommunications network.*" The Office Action alleges that Brockman supports the rejection to Claim 47 at col. 6, lines 13-33. Applicant respectfully disagrees. Brockman's use of a routing label, which is further explained at col. 6, lines 45-62, states, "*Layer 3...contains the routing label that is essential to every SS7 message. The routing label consists of...eight bits...four bits...two bits... (and) two bits. For any given call or transaction, an SSP will allocate the same SLS for all messages that it sends during that call. In the absence of failures, all messages for that call that are sent by the SSP will traverse the same route through the SS7 network down to the link level.*" The above-referenced statement further supports the fact that Brockman does not disclose, teach, or recite the limitations recited in Claim 47, and, even further, emphasizes the fact that Brockman's sole focus is the health of an SS7 data network (i.e., see: bits) by deploying monitoring equipment at STPs (i.e., see: STP1 and STP2 above as applied to the alleged unbalanced loading step) for a single call transaction.

Application No.: 09/783,117

Docket No.: 00-VE06.12C1RCE

With respect to defendant Claim 48, the claimed invention recites, "*wherein the period of time relating to the monitoring signaling between the service switching points (SSPs) and the signal transfer points (STPs) and selecting the signaling relating to multiple interoffice calls is greater than twenty-four hours.*" The Office Action alleges that a "timeout condition," which is only retained for 24 hours, meets the claimed step (see: col. 13, lines 41-57). Applicant respectfully disagrees. Firstly, Applicant agrees with the Office Action that the timeout condition is not greater than 24 hours (see: col. 13, line 56). Secondly, Applicant also respectfully points out that col. 13, lines 41-57, as cited by the Office Action, does not disclose, teach, or suggest the claimed 'signaling between SSPs and STPs.' Thirdly, Applicant also points to the fact that the alleged 'timeout condition' is only related to a Particular call transaction (see: col. 13 at lines 45, 48, 50, and 52). Thus, it is quite clear that Brockman does not meet the limitations of Claim 48 to provide support for the Office Action's rejections.

At best, the suggested combination of Brockman and Malloy would result in the proper operation of STPs in order to analyze an SS7 network for a particular, single transaction by an OLAP. It is respectfully submitted that this is not the claimed invention that teaches a method for analyzing call-carrying voice signaling between SSPs (e.g. a central office, tandem switch, or an end-office switch) in order to monitor for congestion in a trunking network as a result of routing utilization or unbalanced loading between the SSPs in the voice-switching telecommunications network from multiple switched calls. Thus, neither Brockman nor Malloy would suggest that it would be advantageous to combine the references in order to achieve the claimed invention as suggested by the Office Action.

For at least this reason, Claims 1, 23, 29, 32, 38, 43, and 44 are allowable over the applied art, taken singly or in combination. The pending claims that depend from Claims 1, 23, 29, 32, 38, and 44 are likewise allowable over the applied art, taken singly or in combination. Withdrawal of the rejection is respectfully requested. For the same reasons explained above, new Claims 49-60, which depend variously from Claims 1, 23, 29, and 43 are likewise allowable over the applied art.

Application No.: 09/783,117

Docket No.: 00-VE06.12C1RCE

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 07-2347, under Order No. 00-VE06.12C1RCE from which the undersigned is authorized to draw. To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made, the fee for which should be charged to the above account number.

Respectfully submitted,

Dated: March 30, 2004

By 
Joel Wall
Registration No.: 25,648
Verizon Corporate Services Group Inc.
600 Hidden Ridge Drive
Mailcode HQE03H14
Irving, TX 75038
Customer No.: 32127
Telephone: 972-718-4800